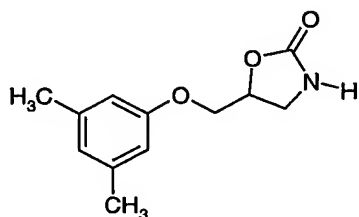


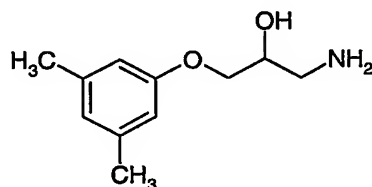
We claim:

1. A novel process for the preparation of 5-(3,5-dimethylphenoxy)methyl-2-oxazolidinone (formula 1) comprising

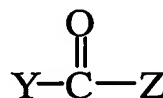


Formula 1

reacting 3-(3,5-dimethylphenoxy)-2-hydroxypropylamine, compound of formula 2, or its acid addition salt with a compound of formula 3,



Formula 2

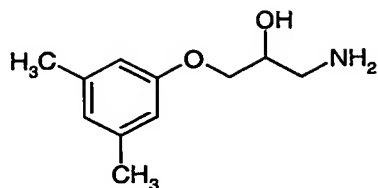


Formula 3

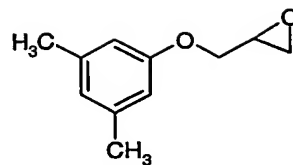
wherein Y and Z are selected from X, CCl_3CO , 1-imidazolyl or substituted imidazolyl, and OR; wherein X is a halo radical, and R is selected from a substituted or unsubstituted linear, branched or cyclic alkyl radical, and aryl or heteroaryl radical.

2. A process as claimed in claim 1 wherein the reaction is carried out in the presence of a base.
3. A process as claimed in claim 2 wherein the base is potassium carbonate.
4. A process as claimed in claim 1 wherein in the compound of formula 3 Y is a halo radical and Z is OR wherein R is a linear C_1 to C_4 alkyl radical.
5. A process as claimed in claim 4 wherein the compound of formula 3 is ethyl chloroformate.
6. A process as claimed in claim 1 wherein the reaction is carried out in the presence of a facilitator.

7. A process as claimed in claim 6 wherein the facilitator is selected from cyclic and acyclic polyethers.
8. A process as claimed in claim 7 wherein the facilitator is poly(ethylene glycol) with an average molecular weight in the range between 200 to 10,000.
- 5 9. A process as claimed in claim 1 wherein the molar ratio of compound of formula 2 to compound of formula 3 is in the range of about 1:0.8 to 1:1.5.
10. A process as claimed in claim 1 wherein the 5-(3,5-dimethylphenoxy)methyl-2-oxazolidinone (formula 1) is obtained in a substantially pure form and has a purity greater than 99%.
- 10 11. A process for purifying 5-(3,5- dimethylphenoxy)methyl-2-oxazolidinone (formula 1) by crystallizing 5-(3,5- dimethylphenoxy)methyl-2-oxazolidinone (formula 1) from an organic solvent system.
12. A process as claimed in claim 11 wherein the 5-(3,5-dimethylphenoxy)methyl-2-oxazolidinone (formula 1) is obtained in a substantially pure form and has a purity greater
15 than 99.5%.
13. A process as claimed in claim 11 wherein the 5-(3,5-dimethylphenoxy)methyl-2-oxazolidinone (formula 1) is obtained in a substantially pure form and has a purity greater than 99.9%.
14. A process as claimed in claim 11 wherein the 5-(3,5-dimethylphenoxy)methyl-2-oxazolidinone (formula 1) is obtained in a substantially pure form and has a purity greater
20 than 99.5% and no individual impurity that is more than 0.05%.
15. A process as claimed in claim 11 wherein the organic solvent system is a mixture of acetone and toluene.
16. A process as claimed in claim 15 wherein the volume ratio of acetone : toluene is about
25 0.5 : 1.0 to 1 : 10.
17. A process for the preparation of 3-(3,5-dimethylphenoxy)-2-hydroxypropylamine, compound of formula 2, comprising



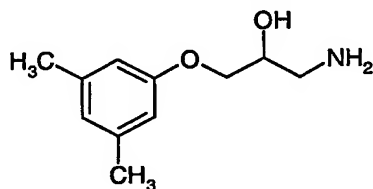
formula 2



formula 5

treating compound of formula 5 with a source of ammonia to yield compound of formula 2, optionally purifying compound of formula 2 by converting to its acid addition salt.

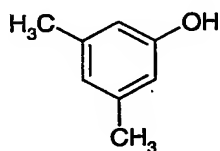
- 5 18. A process as claimed in claim 17 wherein in the source of ammonia is selected from liquor ammonia, liquid ammonia and ammonia gas.
19. A process as claimed in claim 17 wherein the acid addition salt of compound of formula 2 is isolated in substantially pure form.
20. Substantially pure compound of formula 2 or its acid addition salt.



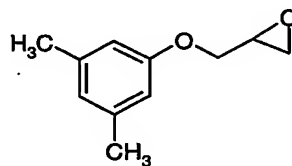
formula 2

21. A process for the preparation of 5-(3,5-dimethylphenoxy)methyl-2-oxazolidinone (formula 1) comprising

- a. reacting 3,5-dimethylphenol, compound of formula 4, with epichlorohydrin and a base to obtain an oxirane, compound of formula 5;
- b. treating compound of formula 5 with a source of ammonia to yield compound of formula 2, optionally purifying compound of formula 2 by converting to its acid addition salt; and

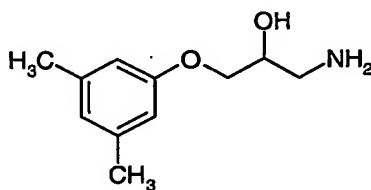


Formula 4

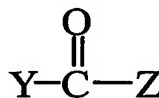


Formula 5

- c. reacting 3-(3,5-dimethylphenoxy)-2-hydroxypropylamine, compound of formula 2, or its acid addition salt with a compound of formula 3.



Formula 2

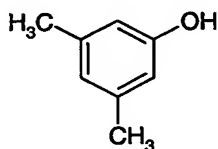


Formula 3

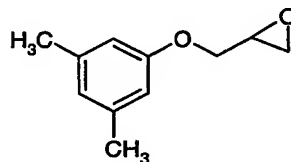
wherein Y and Z are selected from X, CCl_3CO , 1-imidazolyl or substituted imidazolyl, and OR; wherein X is a halo radical, and R is selected from a substituted or unsubstituted linear, branched or cyclic alkyl radical, and aryl or heteroaryl radical.

22. A process as claimed in claim 21 wherein in step (a) the reaction of 3,5-dimethylphenol, epichlorohydrin and a base to obtain an oxirane derivative of formula 5, is carried out in the presence of a facilitator.
23. A process as claimed in claim 22 wherein the facilitator is selected from cyclic and acyclic polyethers.
24. A process as claimed in claim 23 wherein the acyclic polyether is poly(ethylene) glycol with an average molecular weight in the range between 200 to 10,000.
25. A process for the preparation of 5-(3,5-dimethylphenoxy)methyl-2-oxazolidinone (formula 1) comprising

- (a) reacting 3,5-dimethylphenol, compound of formula 4, with epichlorohydrin and a base to obtain an oxirane, compound of formula 5;
- (b) treating compound of formula 5 with a source of ammonia to yield compound of formula 2, optionally purifying compound of formula 2 by converting to its acid addition salt; and

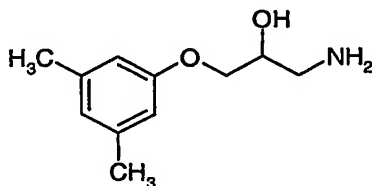


Formula 4

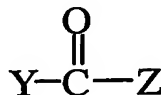


Formula 5

- (c) reacting 3-(3,5-dimethylphenoxy)-2-hydroxypropylamine, compound of formula 2, or its acid addition salt with a compound of formula 3, and



Formula 2

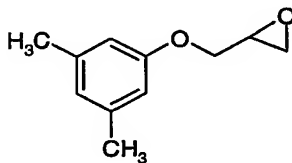


Formula 3

wherein Y and Z are selected from X, CCl_3CO , 1-imidazolyl or substituted imidazolyl, and OR; wherein X is a halo radical, and R is selected from a substituted or unsubstituted linear, branched or cyclic alkyl radical, and aryl or heteroaryl radical.

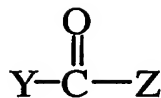
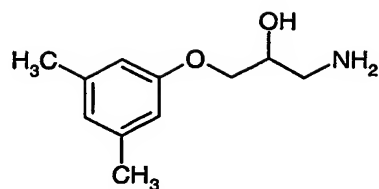
- (d) purifying 5-(3,5- dimethylphenoxy)methyl-2-oxazolidinone (formula 1) by crystallizing 5-(3,5- dimethylphenoxy)methyl-2-oxazolidinone (formula 1) from an organic solvent system.

26. A process for the preparation of 5-(3,5-dimethylphenoxy)methyl-2-oxazolidinone (formula 1) comprising treating compound of formula 5 with a source of ammonia to yield compound of formula 2, optionally purifying compound of formula 2 by converting to its acid addition salt; and



Formula 5

reacting 3-(3,5-dimethylphenoxy)-2-hydroxypropylamine, compound of formula 2, or its acid addition salt with a compound of formula 3,



Formula 2

Formula 3

wherein Y and Z are selected from X, CCl_3CO , 1-imidazolyl or substituted imidazolyl, and OR; wherein X is a halo radical, and R is selected from a substituted or unsubstituted linear, branched or cyclic alkyl radical, and aryl or heteroaryl radical.

27. A process as claimed in claim 26 further comprising purifying 5-(3,5-dimethylphenoxy)methyl-2-oxazolidinone (formula 1) by crystallizing 5-(3,5-dimethylphenoxy)methyl-2-oxazolidinone (formula 1) from an organic solvent system.